

Title (en)

Tool for forming the bottom of a can in the manufacture of cans

Title (de)

Bodenwerkzeug für die Dosenherstellung

Title (fr)

Outil pour le formage du fond d'un conteneur utilisé dans la fabrication de conteneurs

Publication

EP 2359950 A3 20140122 (DE)

Application

EP 11150228 A 20110105

Priority

DE 102010000235 A 20100127

Abstract (en)

[origin: EP2359950A2] The tool (2) has a upper tool part i.e. punch (3), comprising a shape adapted to the desired inner shape of a can. Lower tool part (4) includes a dome (12) and an annular down holder (14) arranged concentrically with the dome and supported movably relative to the dome and subjected to a down holder force. An ejector (23) is annular and arranged concentrically around the dome. The ejector is biased toward the punch by an ejection force which is lower than the down holder force. A spring unit (26) resiliently supporting the ejector.

IPC 8 full level

B21D 51/26 (2006.01); **B21D 22/30** (2006.01)

CPC (source: EP US)

B21D 22/30 (2013.01 - EP US); **B21D 51/26** (2013.01 - EP US)

Citation (search report)

- [X] JP H11104764 A 19990420 - MITSUBISHI MATERIALS CORP
- [XA] JP H035033 A 19910110 - TOYO SEIKAN KAISHA LTD
- [I] DE 3844117 A1 19890720 - REDICON CORP [US]

Cited by

CN105710252A; CN108367397A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2359950 A2 20110824; **EP 2359950 A3 20140122**; DE 102010000235 A1 20110908; DE 102010000235 B4 20120126; JP 2011152585 A 20110811; US 2011179847 A1 20110728

DOCDB simple family (application)

EP 11150228 A 20110105; DE 102010000235 A 20100127; JP 2011013528 A 20110126; US 93119011 A 20110126